



26-003710US SEQ LISTING.TXT

SEQUENCE LISTING

<110> Palese, Peter
Garcia-Sastre, Adolfo

<120> RECOMBINANT NEGATIVE STRAND RNA VIRUS
EXPRESSION SYSTEMS AND VACCINES

<130> 7682-048

<140> 09/396,539

<141> 1999-09-14

<150> 09/106,377

<151> 1998-06-29

<150> 08/252,508

<151> 1994-06-01

<160> 63

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for rescue of the mutant NA gene into virus particles

<400> 1

tacgaggaaa tggttcctgtt a

21

<210> 2

<211> 19

<212> PRT

<213> Influenza virus

<400> 2

Gln Leu Val Trp Met Ala Cys Asn Ser Ala Ala Phe Glu Asp Leu Arg

1 5 10 15

Val Leu Ser

<210> 3

<211> 16

<212> PRT

<213> Influenza virus

<220>

<223> epitope within the NP protein

<400> 3

Thr Tyr Gln Arg Thr Arg Gln Leu Val Arg Leu Thr Gly Met Asp Pro

1 5 10 15

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<211> 95

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<212> DNA
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<400> 4
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tcacctgct tttgctgaat tcattcttct gcagg                               95

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<223> Primer for construction of plasmid pV-d5'

<400> 6
agcttaatac gactcactat aagatctatt aaacttcacc ctgcttttgc tgaattcatt 60
cttctgca                               68

<210> 7
<211> 60
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<220>
<223> Primer for construction of plasmid pV-d5'

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gaagaatgaa ttcagcaaaa gcagggtgaa gtttaataga tcttatagt agtcgtatta 60

<210> 8
<211> 42
<212> DNA
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<220>
<223> Primer for construction of plasmid pHgaNS

<400> 8
ccgaattctt aatacgactc actataagta gaaacaaggg tg                               42

<210> 9
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<212> DNA
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<220>

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<223> Primer for construction of plasmid pHgaNS

<400> 9
cctctagacg ctcgagagca aaagcaggtg 30

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<212> RNA
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<223> Primer for construction of plasmid pHgaNS

<400> 10
cacccugcuu uugcu 15

<210> 11
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<220>
<223> Primer for generating point mutations in promoter sequence

<400> 11
cacccugcuu uuacu 15

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<210> 14
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<220>
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<400> 14
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<210> 15
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<213> Artificial Sequence

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<210> 17
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<220>
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cacccuugcu uuuacu                                     16

<210> 18
<211> 16
<212> RNA
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<220>
<223> Primer for generating point mutations in promoter sequence

<400> 18
cacccuuguu uuuacu                                     16

<210> 19
<211> 16
<212> RNA
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<220>
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<400> 19
cacccuuguu ucuacu                                     16

<210> 20
<211> 96
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 20
ctagacgccc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aatcactggg 60
tataccaccg ttgatatatc ccaatcgcat cgtaaa                               96

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<210> 21
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 <223> Primer for generating flanking sequences of NS RNA to fuse with the coding sequence of the CAT gene

<400> 21
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<210> 22
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<220>
 <223> Primer for generating flanking sequences of NS RNA to fuse with the coding sequence of the CAT gene

<400> 22
 actgcatga gtggcagggc ggggcgtaat agat 34

<210> 23
 <211> 38
 <212> DNA
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<220>
 <223> Primer for construction of plasmid pIVACAT1

<400> 23
 ctagatctat tacgccccgc cctgccactc atcgcagt 38

<210> 24
 <211> 34
 <212> DNA
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<220>
 <223> Primer

<400> 24
 actgcatga gtggcagggc ggggcgtaat agat 34

<210> 25
 <211> 38
 <212> DNA
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<220>
 <223> Primer for generating flanking sequences of NS RNA to fuse with the coding sequence of the CAT gene

<400> 25
 ctagatctat tacgccccgc cctgccactc atcgcagt 38

<210> 26
 <211> 97
 <212> DNA

<213> Artificial Sequence

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<223> Primer for construction of plasmid pIVACAT1

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ctagacgccc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aaatcactgg 60
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<210> 27

<211> 96

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of plasmid pIVACAT1

<400> 27

gttcttttacg atgcgattgg gatatatcaa cggtggtata cccagtgtt tttttctcca 60
ttatgtcttt gtcaccctgc ttttgctgca gggcgt 96

<210> 28

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of pT3NAv

<400> 28

cggaattctc ttcgagcgaa agcaggagtt 30

<210> 29

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of pT3NAv mut 2

<400> 29

catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a 51

<210> 30

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 30

catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a 51

<210> 31

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of pT3NAv mut 2

<400> 31

aatgtatcct attttataat ctagattttg gtcgaaactc acc 43

<210> 32
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer for construction of pT3NA/BIP

<400> 32
 ggccactagt aggtcgacgc cggc 24

<210> 33
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer for construction of pT3NA/BIP

<400> 33
 gcgctggcca tcttgccagc ca 22

<210> 34
 <211> 17
 <212> DNA
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<220>
 <223> Primer for construction of pT3NA/BIP-CAT

<400> 34
 agaaaaaaat cactggg 17

<210> 35
 <211> 17
 <212> DNA
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<220>
 <223> Primer for construction of pT3NA/BIP-CAT

<400> 35
 ttacgccccg ccctgcc 17

<210> 36
 <211> 23
 <212> DNA
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 <223> Primer for construction of pT3BIP-NA

<400> 36
 gcgcatcgat aggtcgacgc cgg 23

<210> 37
 <211> 55
 <212> DNA
 <213> Artificial Sequence

<220>

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<223> Primer for construction of pT3BIP-NA

<400> 37
ggccatcgat ccaatgggta ttattttctg gtttggttc atcttgccag ttggg 55

<210> 38
<211> 91
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3GP2/BIP-NA (L-primer)

<400> 38
atgactggat ccgctagcat ggccatcatt tatctcattc tcctgttcac agcagtgaga 60
ggggaccaga tagaagaatc gcaaaaccag c 91

<210> 39
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3GP2/BIP-NA (M-primer)

<400> 39
atgacagaat tcgtcgactt atctattcac tacagaaag 39

<210> 40
<211> 53
<212> DNA
<213> Artificial Sequence

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<223> Primer for construction of pT3GP2/BIP-NA

<400> 40
gcgcgaaagac gcagcaaaag caggagttaa agctagcatg gccatcattt atc 53

<210> 41
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3HGP2/BIP-NA

<400> 41
cgatggatcc gctagcttgg aatcgatggg ggtgtatc 38

<210> 42
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3HGP2/BIP-NA

<400> 42
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<210> 43
<211> 51

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<212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer for construction of pT3HGP2/BIP-NA

<400> 43
 atgactgtcg acccatggaa gtcaatcgat gttatgttaa accaattcca c 51

<210> 44
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 <212> DNA
 <213> Influenza A virus

<400> 44
 gcgcgaattc tcttcgagca aaagcagg 28

<210> 45
 <211> 18
 <212> DNA
 <213> Influenza virus

<220>
 <223> Position 243-226 of the NA gene

<400> 45
 agagatgaat tgccggtt 18

<210> 46
 <211> 6
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 <213> Human Immunodeficiency Virus-1 (HIV-1)

<400> 46
 Glu Leu Asp Lys Trp Ala
 1 5

<210> 47
 <211> 12
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 47
 ccugcuuuyg cu 12

<210> 48
 <211> 22
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<220>
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<400> 48
 aguagaaaca aggguguuuu uu 22

<210> 49
 <211> 52
 <212> RNA

<213> Influenza A virus

<400> 49
aguagaaaca aggguguuuu uucauaucau uuaacuucac ccugcuuuug cu 52

<210> 50

<211> 53

<212> RNA

<213> Influenza A virus

<400> 50
agcaaaagca gggugaaguu uaaaugauau gaaaaaacac ccuuguuuucu acu 53

<210> 51

<211> 30

<212> RNA

<213> Influenza A virus

<400> 51
agaucuaaua aacuucaccc ugcuuuugcu 30

<210> 52

<211> 43

<212> RNA

<213> Artificial Sequence

<220>

<223> Primer for generate mutagenesis sequence within viral gene segments

<400> 52
aguagaaaca aggguguuuu uucagaucua uuacgccccg ccc 43

<210> 53

<211> 15

<212> RNA

<213> Artificial Sequence

<220>

<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 53
aguagaaaca aggag 15

<210> 54

<211> 14

<212> RNA

<213> Artificial Sequence

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<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 54
aguagaaaca agag 14

<210> 55

<211> 12

<212> RNA

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<220>

<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 55

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ccugcuuucg cu 12

<210> 56
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 <212> DNA
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<400> 56
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<210> 57
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<220>
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<400> 57
 cctgcagaag aatga 15

<210> 58
 <211> 55
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 gugguauacc cagugauuuu uuucuccauu augucuuugu caccugcuu uugcu 55

<210> 59
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 <223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 59
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<210> 60
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<210> 61
 <211> 53
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<220>

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<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 61
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<211> 96

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 62
ctagacgcc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aatcactggg 60
tataccaccg ttgatatac ccaatcgcat cgtaaa 96

<210> 63

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for construction of pT3NAv

<400> 63
ccaagcttat taaccctcac taaaagtaga aacaaggagt tt 42